

Economics Weekly
Innovation and Labor Displacement

Equity Research Macroeconomics

31 October 2025

Richard de Chazal, CFA rdechazal@williamblair.com +44 20 7868 4489

Louis Mukama lmukama@williamblair.com +1 312 364 8867



Please refer to important disclosures on pages 15 and 16. Analyst certification is on page 15.

We seem to be living in a weird world at the moment one in which third-quarter real GDP growth is estimated to have increased by a stunning 3.9% (Atlanta Fed's GDPNow tracker) after 3.8% in the previous quarter, we are in the midst of an AI-related energy and capex boom (with the hyperscalers seemingly in competition over who can spend the most each quarter), the stock market is soaring, and interest rates are low and expected to fall (a little) further. Yet, consumer confidence remains soggy, and job growth has likely been in the vicinity of a paltry 25,000 per month over the past quarter. In addition, and as if on cue, Amazon announced this week that it plans to lay off 14,000 workers from its corporate workforce in an attempt to lower costs and take advantage of increased AI capabilities. If this is the great productivity boom that we've all (at least most economists) been desperately waiting for years to arrive, Joe Public might be justified in asking, is this what we really signed up for? In this Economics Weekly, we look at what is happening with the labor market, productivity growth, and the policy response to these changes.

Why Is the Labor Market Softening?

One prominent area of concern that journalists posed at this week's post-FOMC presser to Fed Chair Powell was, if growth is so strong, why is the labor market weakening?

The chair's response was:

Why has it slowed so much? Well, what's happened is that the supply of workers has dropped very, very sharply due to, mainly, immigration, but also lower labor force participation. And that means there's less need for new jobs because there isn't this flow into the pool of labor that, you know, where people need jobs because there aren't those people now, so there's not a supply of workers showing up for jobs.

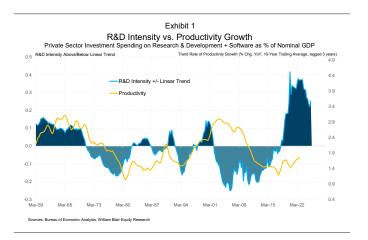
In addition, demand has also gone down, and so has labor force participation ... which is more of a sign in this case of demand, as well as trend. So, I think you're seeing some softening.

The chair's straightforward response, which also highlights what we have been discussing throughout most of this year, was that if you have a "very, very sharp" decline in net immigration, there are fewer people consuming food, clothing, and shelter, and with it demand for labor also declines.

What the good chair does not discuss, however, is the unfolding trend related to the need for the corporate sector to boost capital expenditures on productivity-enhancing

technology to offset these growing labor shortages, which are due to demographic factors and now accelerated by the immigration crackdown and deglobalization—something we have also been writing about for many years now.

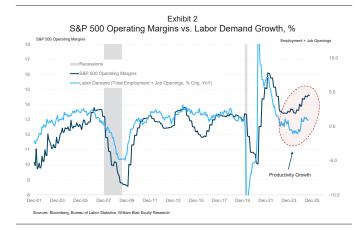
These spending initiatives would include upgrading the aging capital stock and taking advantage of increased government incentives through the IIJA, CHIPS, IRA, and now the OBBB. In addition, we are also now beginning to see the benefits from a massive prior ramp-up in R&D intensity (exhibit 1).



We suspect that it is this initial capex investment wave that is now paying dividends for the corporate sector in maintaining strong demand for investment but limited demand for workers. So far, the second mega wave of productivity-enhancing capex investment—the emergence of AI—is only having a very limited impact (despite the news from Amazon), but this is likely to change in the coming years as use-cases and adoption increase.

More Than a Marginal Impact

While the impact from the first wave has been slow to materialize in the official productivity statistics, as is typically the case, it has been becoming more visible in corporate profit margins. Exhibit 2 is the poster child here.

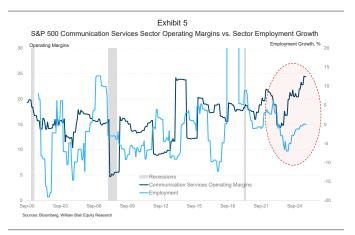


Gentle readers might be forgiven for dismissing the margins in exhibit 2 as being driven by the hyperscalers. But if we look at margins for the aggregate S&P 500 versus the equal-weight index (exhibit 3), there is a stark divergence.

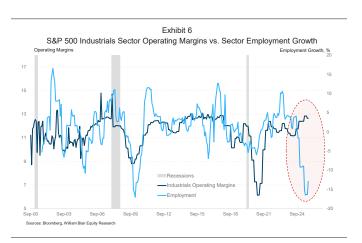


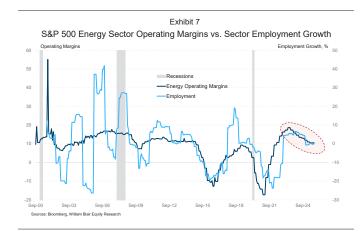
In the following exhibits, we look at the trend in employment growth per S&P 500 sector against that sector's margins (a crude measure of operating efficiency). The perhaps surprising conclusion is that the gains are much more diversified than being solely across the tech industry (exhibit 4-5).

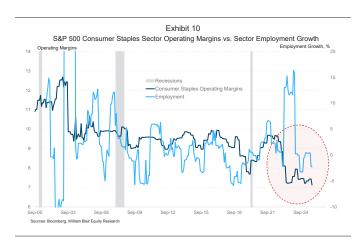


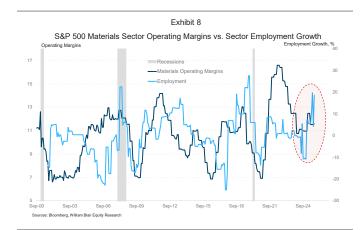


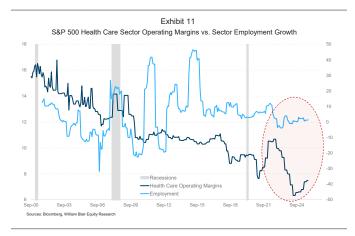
In fact, the standout sector to us seems to be the heavily beaten-down industrials (exhibit 6), which we believe have spent the last three years in their own private recession. They have been using this opportunity to slim down and do more with less, and have been generating much greater efficiencies—reporting the highest margins in almost two decades.

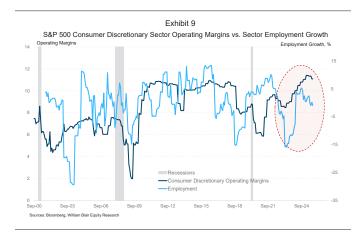


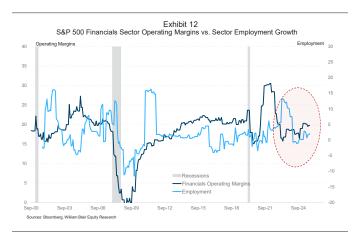


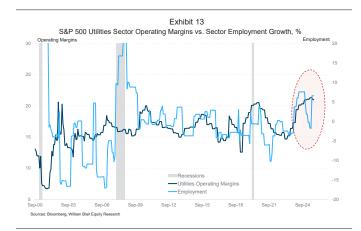












The Costs and Benefits of New Innovation to Society

As this year's recipients of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel have discussed, the extent to which innovation sustainably benefits society ultimately depends on the nature of the innovation, how it is introduced, and how its rewards are distributed.

If, for example, the innovation's gains accrue solely to capital owners—as shareholders often hope and expect—this could further widen income inequality and intensify existing social and political tensions. Such a dynamic would ultimately prove self-defeating, as companies rely on employed income-earning consumers' demand to generate profits.

Many of the recent gains depicted in the preceding exhibits likely stem from a combination of two of the three major types of innovation: incremental innovation (e.g., quality improvements to existing products or services) and variety innovation (e.g., creating a smartwatch to complement a smartphone), as opposed to the far more disruptive creative destruction-type of innovation (e.g., Netflix displacing and bankrupting Blockbuster).

How Policymakers Need to Deal With the Friction

What about the next wave of innovation—AI? Encouragingly, AI is considered a general-purpose technology, meaning it spans all forms of innovation, including creative destruction in some areas. But it is also widely available to society, rather than being held hostage and

monopolized by just one company. Nevertheless, there will also likely be some frictional unemployment that policymakers will have to deal with.

For fiscal policymakers, this likely means stepping up education and retraining programs, finding ways to improve labor mobility, and improving social safety nets—i.e., many of the same things that should have been done but weren't in the early stages of globalization.

For monetary policymakers, this type of structural displacement is not something their toolkits are well equipped to deal with. Simply lowering interest rates could end up doing more damage than good.

While Chair Powell did not explicitly mention it at this week's press conference, we thought one of the underlying messages was that there has been a major sentiment shift on the FOMC around the recent slowing in employment growth—the Fed is increasingly wary about treating any weakening as cyclical as opposed to more structural in nature. The result is that it is now telling the markets that if this is the case, we should expect the committee to be less responsive to such changes than it has been in the past.

Conclusion

There is a strong dichotomy at the moment between the strength in consumption, the strength of financial markets, and the weakness of employment.

When repeatedly asked about this at this week's FOMC meeting, Fed Chair Powell labeled this as mostly weakness on the supply-side, the result of a very sharp fall in immigration and lower participation due to an aging population, coupled with some modest softening in the demand for labor.

Yet, we suspect that a good part of the explanation also related to productivity improvements following years of capital deepening that companies have been engaged in to help offset the increasingly dwindling supply of available labor.

While these productivity gains have been typically slow to turn up in the official statistics, they seem to be apparent in comparisons of corporate profit margins with employment growth in several sectors of the economy.

Looking forward, the next wave of innovation—AI—is already upon us and will very likely exacerbate many of these trends. Indeed, this week's announcement by

Amazon that it was eliminating 14,000 jobs that can now be done with AI is the latest case in point.

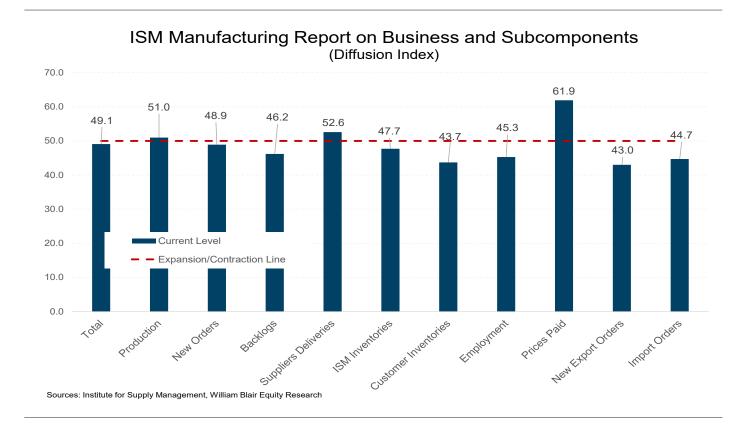
The fact that little of this looks to be cyclical unemployment and is more structural, and therefore not something the Fed is well equipped to resolve, felt like it was one of the key underlying implicit messages from this week's FOMC meeting. The Fed is telling us that it is prepared to act where it can, but it is also gently telling us that if the nature of the employment slowdown has changed, it too will need to reflect that change in its policy decisions.

Highlights in the Week Ahead

Date	Time (ET)	Indicator	Last	Consensus	WB Estimate	Actual
3 Nov	10:00 a.m.	ISM Manufacturing (Oct)	49.1	49.2	48.3	
5 Nov	10:00 a.m.	ISM Services Index (Oct)	50.0	51.0	50.2	
6 Nov	7:30 a.m.	Challenger Layoff Announcements (Oct)	-25.8%	NA	NA	

Sources: Bloomberg, William Blair Equity Research

Indicator of the Week: ISM Manufacturing Report

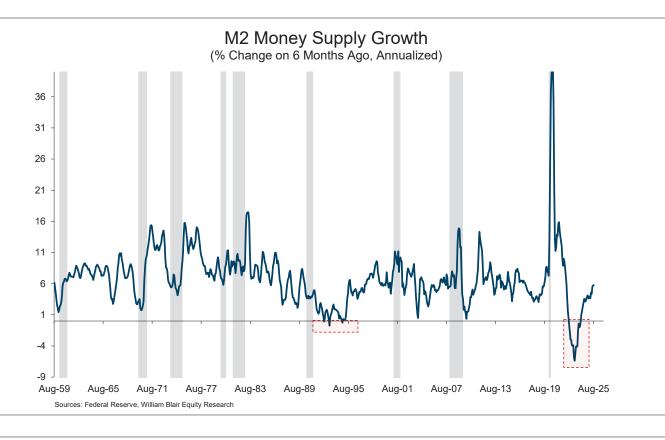


Economic Scorecard

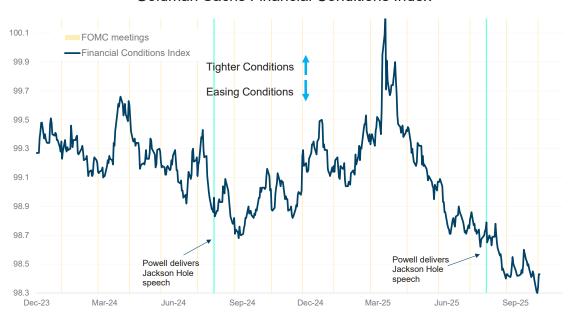
	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
rowth	- Apr. 2.			04.2.	, g	00p 2.	00.2.		200 2 .		. 00 20	20	7 tp. 20	uy 20	04 20	04.20	rug 20	00p 20
US Leading Indicators	-5.4	-5.0	-4.5	-4.7	-4.6	-4.3	-3.7	-3.0	-3.0	-2.7	-3.0	-3.6	-4.3	-3.9	-4.0	-3.4	-3.6	
US Coincident Indicators	1.7	1.9	2.1	1.7	1.7	1.6	1.6	1.3	1.7	1.5	1.5	1.8	2.0	1.4	1.4	1.4	1.5	
US Lagging Indicators	1.4	1.2	1.1	1.0	0.8	0.3	0.1	0.0	0.1	-0.1	0.1	-0.1	0.0	0.8	0.7	0.8	0.9	
onsumer																		
Total Retail Sales	2.6	2.8	2.3	3	1.8	2	3.1	3.9	4.6	4.6	3.9	5.1	5	3.4	4.4	4.1	5.0	
Personal Income	5.7	5.7	5.7	5.6	5.4	5.3	5.5	5.3	5.3	5	5	5.2	5.8	4.9	4.7	4.9	5.1	
Real Disposable Personal Income	2.9	3	3.1	2.9	2.8	2.8	2.7	2.4	2.2	1.8	1.8	2.3	3	1.9	1.6	1.9	1.9	
Real Personal Consumption	2.6	3.1	3.1	3	3	3.4	3.3	3.2	3.6	3.3	2.7	3.2	3.1	2.5	2.5	2.5	2.7	
Personal Saving Rate (%)	5.8	5.8	5.7	5.3	5.2	4.8	5	4.9	4.3	5.1	5.2	5.1	5.7	5.2	5	4.8	4.6	
Consumer Confidence (Conference Board)**	97.5	101.3	97.8	101.9	105.6	99.2	109.6	112.8	109.5	105.3	100.1	93.9	85.7	98.4	95.2	98.7	97.8	95.6
mployment																		
Employment Growth	1.5	1.4	1.3	1.3	1.2	1.3	1.2	1.3	1.3	1.3	1.2	1.1	1.1	1.0	1.0	1.0	0.9	
ASA Temporary Staffing Index	-9.3	-10.2	-9.9	-12.5	-12.2	-12.0	-9.5	-6.6	-21.0	-8.2	-7.5	-8.7	-6.4	-5.8	-5.3	-0.8	-0.9	0.8
ISM Employment Index Manufacturing*	48.2	50.4	48.4	43.6	45.8	44.6	44.8	48.1	45.4	50.3	47.6	44.7	46.5	46.8	45	43.4	43.8	45.3
ISM Employment Index Services*	46.6	47.5	46.7	51	49.6	48.2	52.2	50.9	51.3	52.3	53.9	46.2	49	50.7	47.2	46.4	46.5	47.2
Unemployment Rate, %	3.9	47.5	4.1	4.2	4.2	4.1	4.1	4.2	4.1	4	4.1	4.2	4.2	4.2	4.1	4.2	4.3	
Average Hourly Earnings	4	4.1	3.9	3.6	4	3.9	4.1	4.2	4	3.9	3.9	3.9	3.8	3.8	3.7	3.9	3.7	
Initial Jobless Claims (avg. wkly. chg. '000s)	210	222	237	237	230	225	236	219	222	218	227	223	226	235	241	221	231	238
Jop Openings	-23.7	-15.1	-19.4	-12.8	-17.6	-23.5	-10.9	-7.3	-12.5	-8.3	-11.4	-11.0	-2.9	-2.4	-0.7	-3.9	-5.5	1.7
Layoff Announcements	-3.3	-20.3	19.8	9.2	1	53.4	50.9	26.8	11.4	-39.5	103.2	204.8	62.7	47	-1.6	139.8	13.3	-25.8
· ·	-5.5	-20.3	13.0	5.2	-	00.4	30.9	20.0	11.4	-09.0	100.2	204.0	02.1	41	-1.0	103.0	10.0	-23.0
ousing Market	2.2	16.0	6.0	12.4	E C	4	4.0	14.5	٥٢	17		2.0	0.0	2.6	4.4	12	6	
Housing Starts New Home Sales	2.3 8.1	-16.9 -10	-6.6 -0.4	-13.4 1.1	5.6 7.4	-1 5.3	-1.2 -8.8	-14.5 10.7	-0.5 11.7	-1.7 -2.8	-4 -2.4	3.3 -4.6	0.9 -1.8	-2.6 -5.7	4.1 0.7	-6.5	-6 15.4	
Existing Home Sales	-2.6	-3.1	-5.1	-2.5	-3.7	-3.0	3.1	6.7	9.7	2.3	-0.9	-2.4	-2.0	-0.5	0.0	0.8	1.8	
Median House Price (Existing Homes)	-0.5	-1.6	-0.9	-1.6	-8	-1.2	2.1	-7.4	1.1	-0.2	-1.4	-5.4	-0.4	2.5	-2.5	-7.9	1.9	
Existing Homes Inventory (Mths' supply)	3.5	3.5	3.8	3.7	3.9	4	3.9	3.8	3.7	3.9	3.8	4.2	4.3	4.3	4.4	4.3	4.3	
New Homes Inventory (Mths' supply)	7.7	8.5	8.4	7.9	8.2	7.9	9.3	8.7	8.2	9	9.3	9.2	8.5	9.6	8.9	9	7.4	
NAHB Homebuilder Sentiment*	51	45	43	41	39	41	43	46	46	47	42	39	40	34	32	33	32	32
nflation																		
Consumer Price Index	3.4	3.3	3	2.9	2.5	2.4	2.6	2.7	2.9	3	2.8	2.4	2.3	2.4	2.7	2.7	2.9	3.0
CPI Less-food & energy	3.6	3.4	3.3	3.2	3.2	3.3	3.3	3.3	3.2	3.3	3.1	2.8	2.8	2.8	2.9	3.1	3.1	3.0
Producer Price Index	2.3	2.5	2.9	2.4	2.1	2.1	2.8	2.9	3.5	3.8	3.4	3.2	2.4	2.7	2.4	3.1	2.6	
PPI Less-food & energy	2.5	2.7	3.3	2.6	2.8	3.3	3.6	3.4	3.7	3.9	3.7	3.8	3.1	3.2	2.6	3.4	2.8	
PCE Price Index	2.8	2.7	2.5	2.6	2.4	2.3	2.5	2.6	2.7	2.6	2.7	2.4	2.3	2.5	2.6	2.6	2.7	
PCE Prices Less-food & energy	3.0	2.8	2.8	2.8	2.9	2.8	3.0	3.0	3.0	2.8	3.0	2.7	2.6	2.8	2.8	2.9	2.9	
usiness Activity - US																		
Industrial Production	-0.8	0.0	0.9	-0.5	-0.1	-0.7	-0.4	-0.9	0.4	1.4	1.1	1.0	1.2	0.7	0.9	1.3	0.9	
New Cap Gds Orders less-aircraft & parts	2.1	-2.8	-4	-0.6	-1.8	0.5	0.2	-1.1	1.9	3.3	-0.9	2.2	0.5	2.2	4.5	4.5	2.9	
Business Inventories	0.2	0.6	1.2	1.6	2.1	2.1	1.9	2.2	2.6	1.9	2.5	2.3	2.5	2.2	1.7	1.6	1.5	
ISM Manufacturing PMI*	48.8	48.5	48.3	47	47.5	47.5	46.9	48.4	49.2	50.9	50.3	49	48.7	48.5	49	48	48.7	49.1
Markit US Manufacturing PMI*	50	51.3	51.6	49.6	47.9	47.3	48.5	49.7	49.4	51.2	52.7	50.2	50.2	52	52.9	49.8	53	52
ISM Services Index*	49.6	53.5	49.2	51.4	51.6	54.5	55.8	52.5	54	52.8	53.5	50.8	51.6	49.9	50.8	50.1	52	50
Markit US Services PMI*	51.3	54.8	55.3	55	55.7	55.2	55	56.1	56.8	52.9	51	54.4	50.8	53.7	52.9	55.7	54.5	54.2
	31.3	54.5	55.5	- 00	55.1	55.2	- 55	30.1	00.0	UZ.J	-	54.4	55.0	00.1	02.0	00.1	0 7.0	U 7.2
usiness Activity - International	40.5	45.0	40.5	42.0	40.4	40.0	40	40	40.5	45	40.5	40.0	40.4	40.0	40	40.4	40.0	40.5
Germany Manufacturing PMI Markit/BME*	42.5	45.4	43.5	43.2	42.4	40.6	43	43	42.5	45	46.5	48.3	48.4	48.3	49	49.1	49.8	49.5
Japan Manufacturing PMI Jibun Bank*	49.6	50.4	50	49.1	49.8	49.7	49.2	49	49.6	48.7	49	48.4	48.7	49.4	50.1	48.9	49.7	48.5
Caixin China Manufacturing PMI*	51.4	51.7	51.8	49.8	50.4	49.3	50.3	51.5	50.5	50.1	50.8	51.2	50.4	48.3	50.4	49.5	50.5	51.2
China Manufacturing PMI*	50.4	49.5	49.5	49.4	49.1	49.8	50.1	50.3	50.1	49.1	50.2	50.5	49	49.5	49.7	49.3	49.4	49.8
UK Manufacturing PMI Markit/CIPS*	49.1	51.2	50.9	52.1	52.5	51.5	49.9	48	47	48.3	46.9	44.9	45.4	46.4	47.7	48	47	46.2
France Manufacturing PMI Markit*	45.3	46.4	45.4	44	43.9	44.6	44.5	43.1	41.9	45	45.8	48.5	48.7	49.8	48.1	48.2	50.4	48.2
urrencies***																		
Euro (EUR/USD)	-3.2	1.5	-1.8	-1.6	1.9	5.3	2.9	-2.9	-6.2	-4.2	-4.0	0.2	6.2	4.6	10.0	5.4	5.8	5.4
Renmimbi (USD/CNY)	4.7	1.9	0.2	1.2	-2.3	-3.8	-2.7	1.6	2.8	1.1	1.2	0.5	0.4	-0.6	-1.4	-0.4	0.6	1.5
Yen (USD/Yen)	15.8	12.9	11.5	5.4	0.4	-3.8	0.2	1.1	11.5	5.6	0.4	-0.9	-9.3	-8.4	-10.5	0.5	0.6	3.0
Sterling (GBP/USD)	-0.6	2.4	-0.5	0.2	3.6	9.6	6.1	0.9	-1.7	-2.3	-0.4	2.3	6.7	5.6	8.6	2.7	2.9	0.5
Canadian \$ (USD/CAD)	1.7	0.4	3.3	4.7	-0.1	-0.4	0.4	3.3	8.6	8.2	6.5	6.3	0.2	0.8	-0.5	0.3	1.8	2.9
Mexican Peso (USD/MXN)	-4.8	-3.8	7.0	11.2	15.8	13.0	11.0	17.2	22.7	20.1	20.5	23.6	14.4	14.3	2.3	1.4	-5.4	-7.0
,																		
S Equities	20.0	26.2	22.7	20.2	25.0	24.4	26.0	22.4	22.2	247	16.0	6.0	10.6	120	12.0	110	111	
S&P 500	20.8	26.3	22.7	20.3	25.3	34.4	36.0	32.1	23.3	24.7	16.8	6.8	10.6	12.0	13.6	14.8	14.4	16.1
	20.8 14.9 10.4	26.3 23.9 18.1	22.7 11.7 6.6	20.3 13.5 12.0	25.3 16.9 15.1	34.4 24.8 23.5	36.0 30.9 27.6	32.1 31.3 30.9	23.3 12.2 6.8	24.7 18.6 14.5	16.8 7.1 4.5	6.8 -4.2 -5.0	10.6 -0.3 -3.6	12.0 0.6 -3.4	13.6 5.9 2.8	14.8 1.7 -6.3	14.4 5.3 1.8	16.1 4.5 1.9

^{*} Diffusion Index, **1985=100, ***Currencies - green/red = strengthening/weakening foreign currency vs dollar Source: ISM, Federal Reserve, Census Bureau, Bureau of Labor Statistics, Conference Board, Bloomberg, William Blair

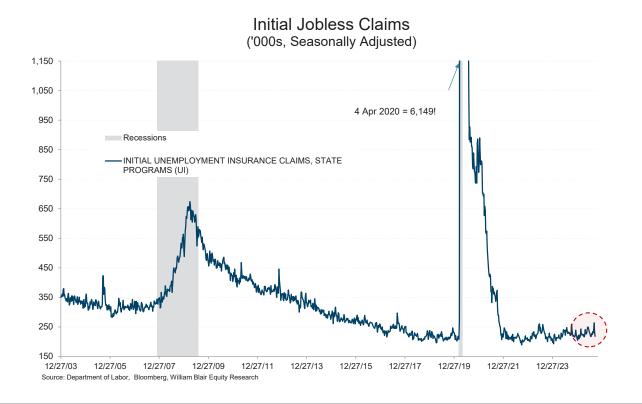
Other Economic Indicators

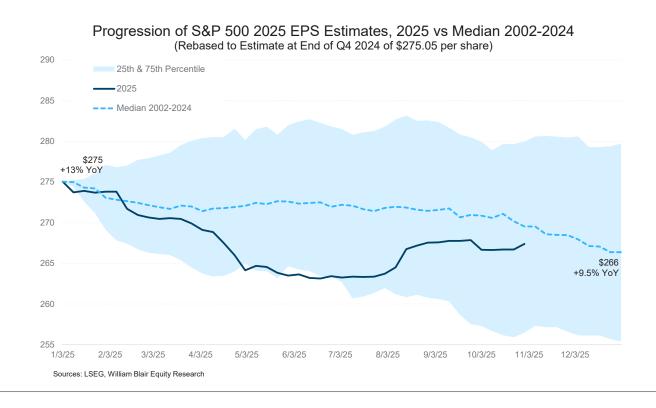


Goldman Sachs Financial Conditions Index



Sources: Bloomberg, William Blair Equity Research

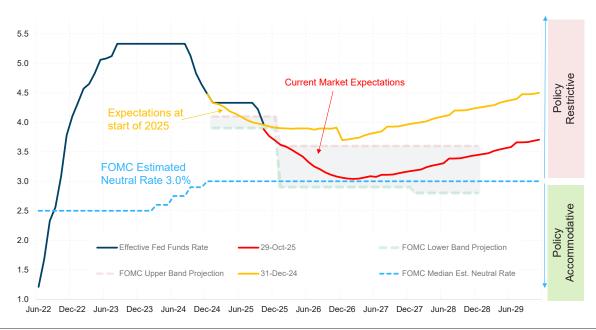




Central Bank Target Short-Term Interest Rates, %



Fed Funds Rate Futures Market Expectations & FOMC Projections, %



S&P 500 Sector Performance

S&P 500 Index	Global Industry Classification System	Current Weight* 30-Oct-25	Week Ago 23-Oct-25	Month Ago 30-Sep-25	Qtr-to-Date 30-Sep-25	Year-to-Date 31-Dec-24
Advertising	S&P 400 MidCap Index S&P 600 SmallCap Index Dow Jones Industrials	100.00	-1.62 -2.15 1.69	-1.13 -1.07 2.42	-1.13 -1.07 2.42	3.39 1.82 11.70
Broadcasting	Communication Services	10.16	2.17	2.06	2.06	26.24
Cable & Satellite 0.21 -6.51 -13.59 -13.59 -28.25 Integrated Telecommunication Services 0.55 0.82 -1.201 1.283 Interactive Home Entertainment 0.16 -0.52 -1.52 -1.52 36.22 Interactive Media & Services 7.46 3.53 6.12 6.12 34.84 Movies & Entertainment 1.24 -1.62 -6.19 -6.19 18.36 Publishing & Printing 0.03 0.56 -13.21 -13.21 -2.75 Wireless Telecommunication Svcs 0.38 -4.24 -12.00 -4.56 Consumer Discretionary 10.35 -1.38 -1.66 -1.66 3.00 Apparel Retail 0.34 0.16 -0.31 -0.31 14.20 Apparel & Accessories & Luxury Goods 0.09 -4.36 -2.01 -2.01 -15.92 Auto Parts & Equipment 0.03 -3.36 -4.76 -4.76 30.17 Auto Parts & Equipment 0.03 -3.36 -4.76 -4.76				-4.34	-4.34	-34.80
Integrated Telecommunication Services 0.55 0.82 -12.01 -12.01 2.83 Interactive Media & Services 7.46 3.53 6.12 6.12 34.84 Movies & Entertainment 1.24 -1.62 -6.19 -6.19 18.36 Movies & Entertainment 1.24 -1.62 -6.19 -6.19 18.36 Interactive Media & Services 7.46 3.53 6.12 6.12 34.84 Movies & Entertainment 1.24 -1.62 -6.19 -6.19 18.36 Interactive Media & Services 7.46 3.53 6.12 6.12 34.84 Movies & Entertainment 1.24 -1.62 -6.19 -6.19 18.36 Interactive Media & Services 7.46 3.05 -1.32 -1.32 -2.75 Interactive Media & Services 0.38 -4.24 -12.00 -12.00 -4.56 Consumer Discretionary 10.35 -1.38 -1.66 -1.66 3.00 Interactive Media & Luxury Goods 0.99 -4.36 -2.01 -2.01 -15.92 Auto Parts & Equipment 0.03 -3.36 -4.76 -4.76 -30.17 Automobile Manufacturers 2.55 -1.48 -0.10 -0.10 -10.79 Automobile Manufacturers 2.55 -1.48 -0.10 -0.10 -10.79 Automobile Retail 0.24 -3.40 -12.34 -12.34 -12.35 Toradline Retail 3.90 0.54 1.32 1.32 2.06 Casinos & Gaming 0.10 -0.91 0.21 0.21 7.65 Computer & Electronics Retail 0.03 0.91 10.00 0.00 -3.05 Consumer Electronics Retail 0.03 0.91 10.00 0.00 -3.05 Consumer Electronics Retail 0.03 0.91 10.00 0.00 -3.05 Consumer Electronics Retail 0.03 0.91 10.00 0.00 -3.05 Flootwear 0.14 -9.07 -8.97 -8.97 -2.59 Home Improvement Retail 0.83 -1.49 -5.87 -5.87 -2.54 Homebuilding 0.19 -4.13 -8.72 -8.72 2.04 Homebuilding 0.19 -4.13 -8.72 -8.72 2.04 Homebuilding 0.19 -4.13 -8.72 -8.72 2.04 Homebuilding 0.08 -3.46 -5.71 -5.71 8.19 Consumer Staples 5.15 -3.58 -2.10 -2.10 -2.10 Engel Homebuilding 0.09 -4.36 -3.37 -3.37 -3.37 -3.37 Engel Homebuilding 0.09 -4.36 -3.37 -3.37 -3.37 Engel Homebuilding 0.09 -4.36 -3.38 -3.38 -3.38 Engel Homebu	O .					
Interactive Home Entertainment						
Interactive Media & Services						
Movies & Entertainment						
Publishing & Printing 0.03 0.56 -13.21 -13.21 -2.75						
Wireless Telecommunication Svcs 0.38						
Consumer Discretionary						
Apparel Retail 0.34 0.16 -0.31 -0.31 14.20 Apparel & Accessories & Luxury Goods 0.09 4.36 -2.01 -2.01 -15.92 Auto Parts & Equipment 0.03 -3.36 -4.76 4.76 30.17 Automobile Manufacturers 2.55 -1.48 -0.10 -0.10 10.79 Automobile Retail 3.90 0.54 1.32 1.32 2.06 Casinos & Gaming 0.10 -0.91 0.21 0.21 7.65 Computer & Electronics Retail 0.03 0.91 10.00 10.00 -3.05 Consumer Electronics 0.07 -14.07 -12.69 -12.69 4.2 Distributors 0.06 -3.57 -6.27 -6.27 -5.57 Footwear 0.14 -9.07 -8.97 -8.97 -25.91 Home Purnishings 0.01 -10.33 -10.35 -2.98 Home Improvement Retail 0.83 -1.47 -5.87 -5.87 Home Limprovement Retail </td <td>Wireless refectionnumenton sves</td> <td>0.50</td> <td>-1.24</td> <td>-12.00</td> <td>-12.00</td> <td>-4.50</td>	Wireless refectionnumenton sves	0.50	-1.24	-12.00	-12.00	-4.50
Apparel Retail 0.34 0.16 -0.31 -0.31 14.20 Apparel & Accessories & Luxury Goods 0.09 4.36 -2.01 -2.01 -15.92 Auto Parts & Equipment 0.03 -3.36 -4.76 4.76 30.17 Automobile Manufacturers 2.55 -1.48 -0.10 -0.10 10.79 Automobile Retail 3.90 0.54 1.32 1.32 2.06 Casinos & Gaming 0.10 -0.91 0.21 0.21 7.65 Computer & Electronics Retail 0.03 0.91 10.00 10.00 -3.05 Consumer Electronics 0.07 -14.07 -12.69 -12.69 4.2 Distributors 0.06 -3.57 -6.27 -6.27 -5.57 Footwear 0.14 -9.07 -8.97 -8.97 -25.91 Home Purnishings 0.01 -10.33 -10.35 -2.98 Home Improvement Retail 0.83 -1.47 -5.87 -5.87 Home Limprovement Retail </td <td>Consumer Discretionary</td> <td>10.35</td> <td>-1.38</td> <td>-1.66</td> <td>-1.66</td> <td>3.00</td>	Consumer Discretionary	10.35	-1.38	-1.66	-1.66	3.00
Apparel & Accessories & Luxury Goods						
Automobile Manufacturers			-4.36	-2.01	-2.01	-15.92
Automobile Retail 3.90 0.54 1.32 1.32 2.06 Broadline Retail 3.90 0.54 1.32 1.32 2.06 Casinos & Gaming 0.10 0.91 0.21 0.21 7.65 Computer & Electronics Retail 0.03 0.91 10.00 10.00 -3.05 Consumer Electronics 0.07 -14.07 -12.69 -12.69 4.22 Distributors 0.06 -3.57 -6.27 -6.27 -5.57 Footwear 0.14 -9.07 -8.97 -8.97 -25.91 Home Furnishings 0.01 -10.33 -10.35 -10.35 -2.98 Home Improvement Retail 0.83 1.149 -5.87 -5.87 -5.87 -2.54 Homebuilding 0.19 -4.13 -8.72 -8.72 2.04 Hotels, Resorts & Cruise Lines 0.80 -2.78 -3.71 -3.71 4.40 Leisure Products 0.02 -1.78 0.92 0.92 36.91 Restaurants 0.85 -4.06 -4.43 -4.43 -2.80 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Consumer Staples 5.15 -3.58 -2.10 -2.10 -0.10 Agricultural Products 0.08 -2.50 5.99 5.99 21.04 Brewers 0.01 -4.32 -3.54 -3.54 -3.54 -23.85 Distillers & Vintners 0.06 -4.49 -9.28 -9.28 -2.30 Food Distributors 0.08 -3.96 -3.08 -3.27 -3.27 -12.48 Pood Distributors 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Equipment & Services 0.20 -0.05 5.92 5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57		0.03	-3.36	-4.76	-4.76	30.17
Broadline Retail 3.90 0.54 1.32 1.32 2.06 Casinos & Gaming 0.10 0.91 0.21 0.21 7.65 Computer & Electronics Retail 0.03 0.91 10.00 10.00 -3.05 Consumer Electronics 0.07 -14.07 -12.69 -12.69 4.22 Distributors 0.06 -3.57 -6.27 -6.27 -5.57 Footwear 0.14 -9.07 -8.97 -8.97 -25.91 Home Furnishings 0.01 -10.33 -10.35 -10.35 -2.98 Home Improvement Retail 0.83 -1.49 -5.87 -5.87 -2.54 Homebuilding 0.19 -4.13 -8.72 -8.72 2.04 Hotels, Resorts & Cruise Lines 0.80 -2.78 -3.71 -3.71 4.40 Leisure Products 0.02 -1.78 0.92 0.92 36.91 Restaurants 0.85 -4.06 -4.43 -4.43 -2.80 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Other Specialty Retail 0.08 -2.50 5.99 5.99 21.04 Food Distributors 0.06 -4.49 -9.28 -3.54 -2.38 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -3.966 Drug Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -1.117 -11.17 -1.27 Energy 2.70 -1.65 -1.82 -1.82 -1.82 2.38 Integrated Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Equipment & Services 0.27 -0.32 0.75 0.75 32.57 -0.25	Automobile Manufacturers	2.55	-1.48	-0.10	-0.10	10.79
Casinos & Gaming 0.10 -0.91 0.21 0.21 7.65 Computer & Electronics 0.03 0.91 10.00 10.00 -3.05 Consumer Electronics 0.07 -14.07 -12.69 -12.69 4.22 Distributors 0.06 -3.57 -6.27 -6.27 -5.57 Footwear 0.14 -9.07 -8.97 -8.97 -25.91 Home Furnishings 0.01 -10.33 -10.35 -10.35 -2.98 Home Improvement Retail 0.83 -1.49 -5.87 -5.87 -2.54 Homebuilding 0.19 -4.13 -8.72 -8.72 2.04 Hotels, Resorts & Cruise Lines 0.80 -2.78 -3.71 -3.71 4.40 Leisure Products 0.02 -1.78 0.92 0.92 36.91 Restaurants 0.85 -4.06 -4.43 -4.43 -2.80 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Consum						
Computer & Electronics Retail 0.03 0.91 10.00 10.00 -3.05 Consumer Electronics 0.07 -14.07 -12.69 -12.69 4.22 Distributors 0.06 -3.57 -6.27 -6.27 -5.57 Footwear 0.14 -9.07 -8.97 -8.97 -25.91 Home Furnishings 0.01 -10.33 -10.35 -10.35 -2.98 Home Improvement Retail 0.83 -1.49 -5.87 -5.87 -2.54 Homely Burder 0.19 -4.13 -8.72 -8.72 2.04 Hotels, Resorts & Cruise Lines 0.80 -2.78 -3.71 -3.71 4.40 Leisure Products 0.02 -1.78 0.92 0.92 36.91 Restaurants 0.85 -4.06 -4.43 -4.43 -2.80 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Consumer Staples 5.15 -3.58 -2.10 -2.10 -0.10						
Consumer Electronics 0.07 -14.07 -12.69 -12.69 4.22 Distributors 0.06 -3.57 -6.27 -6.27 -5.57 Footwaar 0.14 -9.07 -8.97 -8.97 -25.91 Home Furnishings 0.01 -10.33 -10.35 -10.35 -2.98 Home Improvement Retail 0.83 -1.49 -5.87 -5.87 -2.54 Homebuilding 0.19 -4.13 -8.72 -8.72 2.04 Hotels, Resorts & Cruise Lines 0.80 -2.78 -3.71 -3.71 4.40 Leisure Products 0.02 -1.78 0.92 0.92 36.91 Restaurants 0.85 -4.06 -4.43 -4.43 -2.80 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Consumer Staples 5.15 -3.58 -2.10 -2.10 -0.10 Agricultural Products 0.08 -2.50 5.99 5.99 2.99 2.10.4	e					
Distributors 0.06	*					
Footwear						
Home Furnishings						
Home Improvement Retail 0.83						
Homebuilding	<u> </u>					
Hotels, Resorts & Cruise Lines 0.80 -2.78 -3.71 -3.71 4.40 Leisure Products 0.02 -1.78 0.92 0.92 36.91 Restaurants 0.85 -4.06 -4.43 -4.43 -2.80 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Consumer Staples 5.15 -3.58 -2.10 -2.10 -0.10 Agricultural Products 0.08 -2.50 5.99 5.99 21.04 Brewers 0.01 -4.32 -3.54 -3.54 -23.85 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 0.02 0.02 5.16 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57	*					
Leisure Products 0.02 -1.78 0.92 0.92 36.91 Restaurants 0.85 -4.06 -4.43 -4.43 -2.80 Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Consumer Staples 5.15 -3.58 -2.10 -2.10 -0.10 Agricultural Products 0.08 -2.50 5.99 5.99 21.04 Brewers 0.01 -4.32 -3.54 -3.54 -23.85 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products						
Other Specialty Retail 0.08 -3.46 -5.71 -5.71 8.19 Consumer Staples 5.15 -3.58 -2.10 -2.10 -0.10 Agricultural Products 0.08 -2.50 5.99 5.99 21.04 Brewers 0.01 -4.32 -3.54 -3.54 -23.85 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco						
Consumer Staples 5.15 -3.58 -2.10 -2.10 -0.10 Agricultural Products 0.08 -2.50 5.99 5.99 21.04 Brewers 0.01 -4.32 -3.54 -3.54 -23.85 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 1.36<	Restaurants	0.85	-4.06	-4.43	-4.43	-2.80
Agricultural Products 0.08 -2.50 5.99 5.99 21.04 Brewers 0.01 -4.32 -3.54 -3.54 -23.85 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment	Other Specialty Retail	0.08	-3.46	-5.71	-5.71	8.19
Agricultural Products 0.08 -2.50 5.99 5.99 21.04 Brewers 0.01 -4.32 -3.54 -3.54 -23.85 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment						
Brewers 0.01 -4.32 -3.54 -3.54 -23.85 Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services						
Distillers & Vintners 0.05 -7.24 -3.75 -3.75 -39.66 Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Refining & Ma						
Drug Retail 0.02 0.00 0.00 0.00 28.40 Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57						
Food Distributors 0.06 -4.49 -9.28 -9.28 -2.30 Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57						
Food Retail 0.07 -4.70 -2.94 -2.94 7.00 Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57	8					
Household Products 0.78 -1.80 -3.27 -3.27 -12.48 Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57						
Packaged Foods & Meats 0.42 -3.87 -5.70 -5.70 -11.90 Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57						
Personal Care Products 0.08 -3.96 -3.08 -3.08 -14.25 Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57						
Soft Drinks 0.97 -2.00 4.22 4.22 4.43 Tobacco 0.52 -8.78 -11.17 -11.17 17.27 Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57	Personal Care Products					
Energy 2.70 -1.65 -1.82 -1.82 2.38 Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57	Soft Drinks					4.43
Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57	Tobacco	0.52	-8.78	-11.17	-11.17	17.27
Integrated Oil & Gas 1.36 -1.56 0.02 0.02 5.16 Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57	n.	0.50	4.68	4.00	4.00	0.00
Oil & Gas Equipment & Services 0.20 -0.05 3.98 3.98 3.46 Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57						
Oil & Gas Exploration & Production 0.54 -2.65 -5.22 -5.22 -6.70 Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57						
Oil & Gas Refining & Marketing & Transportation 0.27 -0.32 0.75 0.75 32.57	* *					

Financials	12.23	-0.58	-3.12	-3.12	8.01
Asset Management & Custody Banks	0.98	-1.95	-6.67	-6.67	-0.33
Consumer Finance	0.67	0.34	5.59	5.59	21.55
Diversified Banks	3.06	3.31	-0.78	-0.78	23.53
Diversified Financial Services					
	7.28	-1.61	-2.88	-2.88	5.56
Financial Exchanges & Data	1.00	-0.33	-2.56	-2.56	4.02
Insurance Brokers	0.46	-5.58	-11.46	-11.46	-11.10
Investment Banking & Brokerage	1.36	2.83	-0.35	-0.35	33.18
Life & Health Insurance	0.28	0.68	-3.19	-3.19	-1.50
Multi-Sector Holdings	1.06	-2.37	-4.82	-4.82	5.57
Property & Casualty Insurance	0.89	-2.40	-7.06	-7.06	-0.78
Regional Banks	0.25	0.18	-6.23	-6.23	1.69
5					
Reinsurance	0.02	-11.47	-11.72	-11.72	-14.70
Transaction & Payment Processing	2.10	-4.65	-3.39	-3.39	-3.85
Harlah Carra	0.77	4.45	2.54	2.54	4.70
Health Care	8.76	-1.17	3.54	3.54	4.78
Biotechnology	1.51	0.54	3.19	3.19	17.04
Health Care Distributors	0.36	6.65	9.77	9.77	46.81
Health Care Equipment	1.86	-2.49	0.76	0.76	5.86
Health Care Facilities	0.19	5.88	9.16	9.16	50.05
Health Care Services	0.34	-10.66	-6.47	-6.47	20.50
Health Care Supplies	0.06	-3.33	1.98	1.98	-20.83
Life Sciences Tools & Services	0.87	-3.47	11.89	11.89	0.71
Managed Health Care	0.72	-4.44	-0.04	-0.04	-27.98
Pharmaceuticals	2.87	0.53	4.65	4.65	5.46
Industrials	7.82	-0.07	0.21	0.21	17.32
Aerospace & Defense	2.10	-0.96	0.69	0.69	39.36
Agricultural & Farm Machinery	0.20	-0.85	1.78	1.78	9.84
Air Freight & Logistics	0.26	8.16	9.43	9.43	-12.34
Building Products	0.47	2.70	0.88	0.88	10.39
Cargo Ground Transportation	0.07	0.67	5.04	5.04	-16.54
Construction & Engineering	0.16	1.88	6.39	6.39	37.84
Construction Machinery & Heavy Trucks	0.68	8.50	14.29	14.29	37.82
Data Processing & Outsourced Services	0.04	-4.78	-7.21	-7.21	-2.25
Diversified Support Svcs	0.19	-4.56	-8.62	-8.62	-11.18
Electrical Components & Equipment	0.56	2.92	3.83	3.83	14.37
Environmental & Facilities Services	0.32	-5.54	-7.76	-7.76	2.73
Heavy Electrical Equipment	0.25	-3.54	-6.64	-6.64	74.53
Human Resource & Employment Services	0.27	-6.44	-9.51	-9.51	-11.68
Industrial Conglomerates	0.36	-3.48	3.30	3.30	5.31
Industrial Machinery	0.62	-0.90	-0.25	-0.25	3.52
Passenger Airlines	0.13	-3.07	-2.03	-2.03	-5.82
Passenger Ground Transportation	0.32	1.99	-1.51	-1.51	59.96
Railroads	0.42	-0.39	-5.25	-5.25	4.56
Research & Consulting Svcs	0.16	-4.96	-8.31	-8.31	-4.19
Trading Companies & Distributors	0.24	-3.69	-9.15	-9.15	9.12
			7.20		
Information Technology	34.74	4.94	6.55	6.55	29.72
Application Software	2.70	0.95	-0.83	-0.83	8.79
Communications Equipment	0.93	2.19	4.43	4.43	22.50
Electronic Components	0.40	3.49	11.71	11.71	97.19
Electronic Equipment & Instruments	0.14	-3.13	-6.09	-6.09	0.72
Electronic Manufacturing Services	0.15	4.78	8.54	8.54	65.99
Internet Software & Services	0.08	-4.28	-10.05	-10.05	-18.47
IT Consulting & Services	0.82	5.18	6.18	6.18	-1.00
Semiconductor Equipment	0.93	5.99	16.22	16.22	74.98
Semiconductors	13.24	9.40	11.53	11.53	53.23
	8.38				24.56
Systems Software		0.09	0.85	0.85	
Technology Distributors	0.03	-1.06	-1.56	-1.56	-9.91
Technology Hardware, Storage & Peripherals	6.93	4.71	6.68	6.68	10.44
**	4 =0		4.00	4.00	
Materials	1.59	-3.48	-4.28	-4.28	3.12
Commodity Chemicals	0.05	-3.12	-1.29	-1.29	-40.04
Construction Materials	0.12	-0.86	-4.28	-4.28	15.60
Copper	0.10	1.21	6.40	6.40	9.58
* *	-	•	-	-	

Fertilizers & Agricultural Chemicals	0.10	-3.74	-10.29	-10.29	4.43
Gold	0.14	-7.42	-2.37	-2.37	121.14
Industrial Gases	0.41	-4.39	-9.66	-9.66	-1.81
Metal & Glass Containers	0.02	-4.85	-6.21	-6.21	-14.22
Paper Packaging	0.14	-12.27	-9.36	-9.36	-22.37
Specialty Chemicals	0.40	-1.30	-0.89	-0.89	-1.75
Steel	0.09	6.88	11.67	11.67	32.14
Real Estate	1.77	-3.60	-2.76	-2.76	0.61
Data Center REITs	0.23	-0.99	3.18	3.18	-8.64
Health Care REITs	0.29	0.78	-0.83	-0.83	24.46
Hotel & Resort REITs	0.02	-3.31	-5.52	-5.52	-8.22
Industrial REITs	0.19	-1.22	8.48	8.48	17.53
Multi-Family Residential REITs	0.00	-5.84	-7.99	-7.99	-17.31
Office REITs	0.02	-4.48	-5.26	-5.26	-5.29
Other Specialized REITs	0.10	-4.36	-5.37	-5.37	-1.29
Real Estate Service	0.12	-8.28	-9.29	-9.29	7.95
Retail REITs	0.23	-3.82	-5.92	-5.92	0.39
Self-Storage REITs	0.13	-9.23	-3.40	-3.40	-7.69
Single-Family Residential REITs	0.13	-9.23	-3.40	-3.40	-7.69
Telecom Tower REITs	0.23	-5.65	-5.57	-5.57	-2.02
Timber REITs	0.03	-1.42	-5.16	-5.16	-16.48
Utilities	2.24	-0.64	2.81	2.81	18.36
Electric Utilities	1.47	0.18	5.25	5.25	20.98
Gas Utilities	0.04	-1.37	1.52	1.52	24.47
Independent Power Producers & Energy Traders	0.12	-0.93	-1.90	-1.90	33.10
Water Utilities	0.04	-11.14	-8.97	-8.97	1.78
Multi-Utilities	0.56	-1.81	-1.22	-1.22	10.10

 $[\]hbox{*Current Weight is market cap based, based on calculations by William Blair Intl. Ltd.}\\$

IMPORTANT DISCLOSURES

This report is available in electronic form to registered users via R*Docs™ at https://williamblairlibrary.bluematrix.com or www.williamblair.com.

Please contact us at +1 800 621 0687 or consult https://www.williamblair.com/equity-research/coverage for all disclosures.

Richard de Chazal attests that 1) all of the views expressed in this research report accurately reflect his/her personal views about any and all of the securities and companies covered by this report, and 2) no part of his/her compensation was, is, or will be related, directly or indirectly, to the specific recommendations or views expressed by him/her in this report. We seek to update our research as appropriate. Other than certain periodical industry reports, the majority of reports are published at irregular intervals as deemed appropriate by the research analyst.

DOW JONES: 47632.00 S&P 500: 6890.59 NASDAQ: 23958.50

Additional information is available upon request.

Current Rating Distribution (as of October 30, 2025):

Coverage Universe	Percent	Inv. Banking Relationships *	Percent	
Outperform (Buy)	72	Outperform (Buy)	10	
Market Perform (Hold)	28	Market Perform (Hold)	3	
Underperform (Sell)	1	Underperform (Sell)	0	

^{*}Percentage of companies in each rating category that are investment banking clients, defined as companies for which William Blair has received compensation for investment banking services within the past 12 months.

The compensation of the research analyst is based on a variety of factors, including performance of his or her stock recommendations; contributions to all of the firm's departments, including asset management, corporate finance, institutional sales, and retail brokerage; firm profitability; and competitive factors.

OTHER IMPORTANT DISCLOSURES

Stock ratings and valuation methodologies: William Blair & Company, L.L.C. uses a three-point system to rate stocks. Individual ratings reflect the expected performance of the stock relative to the broader market (generally the S&P 500, unless otherwise indicated) over the next 12 months. The assessment of expected performance is a function of near-, intermediate-, and long-term company fundamentals, industry outlook, confidence in earnings estimates, valuation (and our valuation methodology), and other factors. Outperform (O) - stock expected to outperform the broader market over the next 12 months; Market Perform (M) - stock expected to perform approximately in line with the broader market over the next 12 months; Underperform (U) - stock expected to underperform the broader market over the next 12 months; not rated (NR) - the stock is not currently rated. The valuation methodologies include (but are not limited to) price-to-earnings multiple (P/E), relative P/E (compared with the relevant market), P/E-to-growth-rate (PEG) ratio, market capitalization/revenue multiple, enterprise value/EBITDA ratio, discounted cash flow, and others. Stock ratings and valuation methodologies should not be used or relied upon as investment advice. Past performance is not necessarily a guide to future performance.

The ratings and valuation methodologies reflect the opinion of the individual analyst and are subject to change at any time.

Our salespeople, traders, and other professionals may provide oral or written market commentary, short-term trade ideas, or trading strategies-to our clients, prospective clients, and our trading desks-that are contrary to opinions expressed in this research report. Certain outstanding research reports may contain discussions or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Investing in securities involves risks. This report does not contain all the material information necessary for an investment decision. Always refer to the most recent report on a company or issuer. Our asset management and trading desks may make investment decisions that are inconsistent with recommendations or views expressed in this report. We will from time to time have long or short positions in, act as principal in, and buy or sell the securities referred to in this report. Our research is disseminated primarily electronically, and in some instances in printed form. Research is simultaneously available to all clients. This research report is for our clients only. No part of this material may be copied or duplicated in any form by any means or redistributed without the prior written consent of William Blair & Company, L.L.C.

This is not in any sense an offer or solicitation for the purchase or sale of a security or financial instrument.

The factual statements herein have been taken from sources we believe to be reliable, but such statements are made without any representation as to accuracy or completeness or otherwise, except with respect to any disclosures relative to William Blair or its research analysts. Opinions expressed are our own unless otherwise stated and are subject to change without notice. Prices shown are approximate.

This report or any portion hereof may not be copied, reprinted, sold, or redistributed or disclosed by the recipient to any third party, by content scraping or extraction, automated processing, or any other form or means, without the prior written consent of William Blair. Any unauthorized use is prohibited.

If the recipient received this research report pursuant to terms of service for, or a contract with William Blair for, the provision of research services for a separate fee, and in connection with the delivery of such research services we may be deemed to be acting as an investment adviser, then such investment adviser status relates, if at all, only to the recipient with whom we have contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing). If such recipient uses these research services in connection with the sale or purchase of a security referred to herein, William Blair may act as principal for our own account or as riskless principal or agent for another party. William Blair is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

For important disclosures, please visit our website at williamblair.com.

This material is distributed in the United Kingdom and the European Economic Area (EEA) by William Blair International, Ltd., authorised and regulated by the Financial Conduct Authority (FCA). William Blair International, Limited is a limited liability company registered in England and Wales with company number 03619027. This material is only directed and issued to persons regarded as Professional investors or equivalent in their home jurisdiction, or persons falling within articles 19 (5), 38, 47, and 49 of the Financial Services and Markets Act of 2000 (Financial Promotion) Order 2005 (all such persons being referred to as "relevant persons"). This document must not be acted on or relied on by persons who are not "relevant persons."

This report is being furnished in Brazil on a confidential basis and is addressed to the addressee personally, and for its sole benefit. This does not constitute an offer or solicitation for the purchase or sale of a security by any means that would constitute a public offering in Brazil under the regulations of the Brazilian Securities and Exchange Commission (*Comissão de Valores Mobiliários*) or an unauthorized distribution under Brazilian laws and regulations. The securities are authorized for trading on non-Brazilian securities markets, and this report and all the information herein is intended solely for professional investors (as defined by the applicable Brazilian regulation) who may only acquire these securities through a non-Brazilian account, with settlement outside Brazil in a non-Brazilian currency.

"William Blair" and "R*Docs" are registered trademarks of William Blair & Company, L.L.C. Copyright 2025, William Blair & Company, L.L.C. All rights reserved.

William Blair & Company, L.L.C. licenses and applies the SASB Materiality Map® and SICSTM in our work.